1993
Executive Research Project
S65

Facility Contracting: A Strategy To Bring Life To Inactive Army Ammunition Plants

Lieutenant Colonel
Harry J. Sawyer
U.S. Army

Faculty Research Advisor
Lieutenant Colonel Marcus R. Erlandson, USA

The Industrial College of the Armed Forces
National Defense University
Fort McNair, Washington, D.C. 20319-6000

Unclassified
SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION Unclassified	1b. RESTRICTIVE MARKINGS
2a. SECURITY CLASSIFICATION AUTHORITY N/A	3 DISTRIBUTION / AVAILABILITY OF REPORT Distribution Statement A: Approved for public release; distribution is unlimited.
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE N/A	
4 PERFORMING ORGANIZATION REPORT NUMBER(S) NDU-ICAF-93-065	5. MONITORING ORGANIZATION REPORT NUMBER(S) Same
6a. NAME OF PERFORMING ORGANIZATION Industrial College of the Armed Forces 6b OFFICE SYMBOL (If applicable) ICAF-FAP	7a. NAME OF MONITORING ORGANIZATION National Defense University
6c. ADDRESS (City, State, and ZIP Code) Fort Lesley J. McNair Washington, D.C. 20319-6000	7b. ADDRESS (City, State, and ZIP Code) Fort Lesley J. McNair Washington, D.C. 20319-6000
8a. NAME OF FUNDING / SPONSORING ORGANIZATION 8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER
8c. ADDRESS (City, State, and ZIP Code)	10. SOURCE OF FUNDING NUMBERS PROGRAM ELEMENT NO. / PROJECT NO. / TASK NO. / WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) Facility Contracting: A Strategy to Bring Life to Inactive Army Ammunition Plants	
12. PERSONAL AUTHOR(S) Harry J Sawyer	
13a. TYPE OF REPORT Research 13b. TIME COVERED FROM Aug 92 TO Apr 93	14. DATE OF REPORT (Year, Month, Day) April 1993 15. PAGE COUNT 38
16. SUPPLEMENTARY NOTATION	
17. COSATI CODES FIELD / GROUP / SUB-GROUP	18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
19. ABSTRACT (Continue on reverse if necessary and identify by block number) SEE ATTACHED	
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT ☒ UNCLASSIFIED/UNLIMITED ☒ SAME AS RPT. ☐ DTIC USERS	21. ABSTRACT SECURITY CLASSIFICATION Unclassified
22a. NAME OF RESPONSIBLE INDIVIDUAL Judy Clark	22b. TELEPHONE (Include Area Code) (202) 475-1889 22c. OFFICE SYMBOL ICAF-FAP

DD FORM 1473, 84 MAR 83 APR edition may be used until exhausted. All other editions are obsolete.

SECURITY CLASSIFICATION OF THIS PAGE
UNCLASSIFIED

ABSTRACT

What does the nation do with ammunition production plants after the fighting stops? The U.S. military has struggled with the answer to this question throughout the 20th century. In 1990, the U.S. Army developed and implemented a new and innovative answer - issue facility contracts to operating contractors at inactive government-owned and contractor-operated (GOCO) plants. The objective is to convert mothballed ammunition plants into partially active commercial operations. Facility contracting stands at the forefront of today's defense conversion initiatves.

This paper reviews facility contracting, its regulatory underpinnings and evolution, and experience gained at the first plant to make the transition - Mississippi Army Ammunition Plant. In addition to pointing out obstacles which have impeded implementation thus far, ongoing political and military initiatives to overcome these problems are explored. Finally, this paper offers recommendations and guidance for the Department of Defense and the U.S. Army as they reshape and expand the implementation of facility contracting during the next few years.

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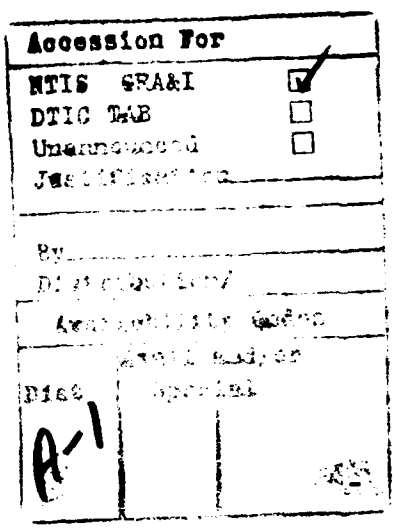

FACILITY CONTRACTING: A STRATEGY TO BRING LIFE TO INACTIVE ARMY AMMUNITION PLANTS

> A nation such as the United States cannot afford to scrap that production capacity (ammunition) over and over again. This time these plants ought to remain in stand-by for years to come and, most important, plant and equipment should be rehabilitated and renovated periodically.
>
> Leo A. Codd
> Army Ordnance Association
> Eve World War II[1]

What does the nation do with production plants after the shooting stops? The end of fighting starts a chain reaction which is difficult to stop: ammunition requirements decline forcing plants to close production lines and lay off employees; political leaders refocus attention from industrial readiness to pressing domestic issues; and Congress cuts funds for defense, particularly idle ammunition plants. Historically, this pattern forced ammunition base managers to scrap good production plants and to let others deteriorate due to lack of maintenance.

Following breakdowns of the nation's ammunition base at the outset of both World Wars and the Korean War, Congress took Mr. Codd's advise to heart and, for the first time in 1952, authorized funds to preserve and maintain a standby ammunition production capability. These World War II and Korean War vintage plants remained a cornerstone of the nation's ammunition industrial base for the past forty years.

The end of the Cold War destroyed the strategic foundation which underpinned Congressional and military support for a large

ammunition base. Pressures for a "peace dividend" diverted funds destined for ammunition procurement and facility maintenance. We once again have come to the final stage of the post-war chain reaction. Will we return to the pre-1950 philosophy of just discarding the ammunition production base, or is there a cost effective alternative?

Facility contracting has the potential to be the long sought alternative. In March 1992, the U.S. Army converted its first inactive plant to a facility contract - the objective: to convert mothballed ammunition plants into partially active commercial operations. The facility contract gives the operating contractor latitude to compete for work in both commercial and defense markets. In theory, this approach improves plant readiness, reduces government maintenance costs, and assists local communities by maintaining a larger employment base at the plant - a clear winning combination ... if it works.

HISTORICAL PERSPECTIVE AND SNAPSHOT OF THE PRODUCTION BASE

Throughout the 20th century, ammunition production has been one of the weakest elements of U.S. preparedness for war. Following World War I, Assistant Secretary of War Benedict Cromwell stated: "The war taught us that Americans can organize, train, and transport troops of superior sort at a rate which leaves far behind any producible program for the manufacture of munitions".[2] His statement remains valid today.

World Wars and Inter-War Years - Production Base Rises and Falls

Before World War I, the U.S. depended primarily on foreign and domestic commercial suppliers to meet its small ammunition requirements. Once we entered the war, these sources proved inadequate, forcing the government to build thirty-two plants to augment commercial suppliers.[3] The war was essentially over before this large government ammunition complex could generate meaningful production rates (e.g. production lead time was twelve months for small arms and eighteen months for artillery ammunition). As a result, U.S. forces had to fight primarily with ammunition made in France and Great Britain.[4] In general, the nation's efforts to mobilize and build the necessary industrial capacity to manufacture munitions and armaments were a "distinct disappointment."[5]

In the two decades following World War I, the nation's capacity to manufacture ammunition declined significantly. Military planners, facing the realities of peacetime budgets, scrapped plants and sold others for commercial uses. On the eve of World War II, ammunition stocks and the production base were in such poor condition that Secretary of War Harry Stimson stated:

> We didn't have enough powder in the whole United States to last the men we now have overseas for anything like a day's fighting. And, what is worse, we didn't have powder plants or facilities to make it; they had had all been destroyed after the war.[6]

To meet rapidly escalating demand, the Army's Ordnance Department created an extensive network of government-owned and contractor-operated (GOCO) ammunition plants. This innovative contracting concept brought critical civilian expertise into the ammunition sector, while allaying private company concerns over high capital costs and fluctuating product demand. The expansion program began in earnest in mid-1940 when the government began constructing six plants. At the end of the war, we had eighty-four ammunition plants operating and another twenty-nine under construction.[7] The massive base reconstruction effort cost over three billion dollars.[8] In 1944, the peak production year, the U.S. produced more ammunition than all of its enemies and allies combined.[9]

Rapid production increases would not have been possible, however, without the planning, tooling, and education initiatives which commenced in 1937 (four years before the President ordered total mobilization). Building upon this work, rearmament began in mid-1940 many months before our formal entry into war.[10] Extensive warning and timely action by political and military leaders allowed the U.S. to overcome lengthy plant construction and equipment procurement lead times without serious munition shortfalls.

The Korean War and Vietnam Conflict - The Production Base Ages

Following World War II, the nation entered a peacetime readjustment period, and the military once again began disposing

of idle ammunition plants. At the outbreak of the Korean War, only thirty-eight of the original eighty-four World War II plants remained; the Army disposed of the others during the inter-war years.[11] The Army ultimately reactivated twenty-two plants, spending over $500 million in the process.[12] Plants required extensive renovation before production could commence (due to lack of maintenance since 1945). Plant reactivation averaged thirteen months, demonstrating the long time required to restore the ammunition base following periods of neglect.[13] While long warning time saved the day during World War II, huge World War II ammunition surpluses filled early production voids during the Korean War.

With the beginning of the Cold War in 1952, political and military leaders recognized the importance of maintaining a ready ammunition production capability. Congress authorized funds to preserve and maintain some plants in a standby status. A goal of ninety to 120 day reactivation time was established. By the late 1950s, even when confronted with the Soviet military threat, the ammunition sector fell victim to the nation's focus on a peacetime economy and the military's heavy reliance on nuclear weapons.[14]

In mid-1960, the nation again called on the production base to support the Vietnam Conflict. Some twenty-five years old and down to twenty-five plants, the base showed the effects of age

and neglect. Production line reactivation averaged eighteen months. Obsolete processes polluted the environment and violated new safety standards.[15] Although Vietnam was a "low intensity conflict," ammunition demand taxed the system to its limit.

What History Tells Us

Ammunition is essential in modern war. While there is limited commercial production for small arms and excavating explosives, the military is the predominant cusumer. Military demand for ammunition rises precipitously during war and falls sharply when the war ends. In a free market economy, private companies dispose of plants or convert them to other products once demand disappears. The government, therefore, has had to take extraordinary measures to insure the nation maintains capability in peacetime to manufacture munitions in wartime.

History shows that rebuilding ammunition plants and reactivating neglected production lines is a time consuming and expensive process. Even initial low production rates take twelve to eighteen months to reestablish. During the 20th century, the U. S. has used three basic approaches to overcome the long lead times associated with ammunition manufacturing: rely on large war reserve stocks (pre-Korean War approach), disregard the production base during peace and assume adequate warning time to rebuild it before a war begins (pre-World War I and II approach), or maintain the production base in partial readiness (Cold War approach).

A View of the Government-Owned Ammunition Plant Base

For four decades, World War II vintage plants formed the backbone of U.S. production capability. Scattered throughout the nation's heartland, these plants are huge industrial facilities. For example, Illinois Ordnance Works, a typical World War II era plant, contained eight loading lines spread over 24,000 acres. To support operations and employee administration (plants employed as many as 10,000 to 20,000 people during peak production), each plant needs a complete infrastructure of administrative buildings, electrical and steam plants, explosive magazines, and road and rail networks. Many plants have over 1000 buildings and 100 miles of highway and railway track.[16]

The government constructed these plants with the huge ammunition requirements of World War II in mind. During the war, production lines hummed twenty-four hours a day. In peace, however, the government has had to lay away or discard the excess production capacity. Throughout the Cold War era, the government usually chose to lay away idle plants and lines. A facility or production line in layaway resembles a ghost town, but with one big distinction - workers have taken actions to protect buildings and equipment against the elements. These actions include cleaning and painting production equipment, coating metal surfaces with oil-based preservatives, sealing building windows and doors, and in some cases, placing critical equipment into humidity controlled environments. A small cadre of personnel

remains to perform minimum levels of maintenance and provide the expertise to reactivate utilities, buildings and equipment. Thus, even inactive plants continue to cost the Department of Defense (DOD) several million dollars each year.

Since 1960, the U.S. ammunition production base centered on approximately twenty-five government-owned production plants, most contracted to private companies to operate. These plants shifted from active to inactive status (all lines laid away) based on assigned workload. Even at the active plants, most production lines remained in layaway because of low peacetime production volumes.

STRATEGIC SETTING AND FUTURE TRENDS IN THE BASE

During the Cold War, the threat of a U.S. - Soviet Union confrontation (World War III) drove military planning and shaped the military industrial base. The government retained a large ammunition complex to sustain combat forces in a global war. The Soviet threat is gone. In the post-Cold War era, the focus is on restructuring and downsizing the armed forces and defense industrial base in light of the changing and reduced threats to U.S. national security interests.

The Impact on the Ammunition Production Base

The chain reaction noted at the outset of this paper has already impacted the ammunition production base. Political and budgetary pressures for a "peace dividend" resulted in massive

reductions in DOD's ammunition procurement and facilities maintenance programs. There is huge overcapacity. In the private sector alone, annual production capacity exceeds four billion dollars, while DOD's ammunition budget has dropped to around $800 million.[17] Declining procurement budgets and shrinking force structure point to a dramatically smaller ammunition production base.

In response to these circumstances, the U.S. Army Armament, Munitions and Chemical Command (AMCCOM) - the Army's lead agency in performing its assigned role as DOD's Single Manager of Conventional Ammunition - developed a new strategy to rationalize the base. Called "Ammo Fast 21", it recasts the government-owned base by:

- o Reducing the number of active plants from 16 to 8.
- o Ensuring that an active production capability exists for critical munitions (high force multiplier/warfighting items).
- o Designating certain active plants as technology centers to preserve critical skills and processes.
- o Excessing three inactive plants.
- o Converting several inactive plants to caretaker status, essentially eliminating most maintenance and support services.
- o Expanding opportunities for commercial use of plant facilities and equipment.[18]

Implementation of the Ammo Fast 21 strategy results in dramatic personnel cutbacks - possibly cutting the workforce at government-owned plants from over 21,000 in 1991 to around 7,000

by 1997.[19] In addition to drastically reducing the nation's ability to surge ammunition production, these reductions foretell a difficult transition period for workers, their families and communities in which ammunition plants are located.

New National Security Strategy Drives Changes

The new national military security strategy issued by President Bush in August 1991 has been the driver in reshaping the defense industrial base. The one dimensional focus on a global war with the Soviet Union is gone. Planning and military strategy now concentrate on regional conflicts. The new strategy is based on retaining military capability which can deter strategic attack, maintain forward deployed presence, respond to a variety of crisis situations, and reconstitute forces after deployment.[20] Crisis response and reconstitution are the areas of primary interest to military ammunition planners.

Crisis response involves fast reaction and short duration conflict. Ammunition in storage, limited adjustments to production workloads at active plants and private industry, and foreign purchases provide the avenues of response. Ammunition inventories, particularly older generation munitions left over from the Cold War, provide a large "nest egg" in which to base contingency plans. Since crisis response relies on a "come as you are" philosophy, the inactive plant base has no role to play.

Introduction of a reconstitution strategy carries the greatest weight in reshaping the ammunition production base.

Reconstitution involves "building additional units and force structure beyond that inherent in the existing active and reserve component force structure."[21] In essence, reconstitution restores the military's global war fighting capability lost in recent DOD budget cutbacks. DOD assumes sufficient warning (five years or longer) to rebuild the industrial base before a truly global threat can endanger national security.

On the surface, reconstitution provides strong rationale for eliminating essentially all inactive ammunition plants. If inactive plants have no role in crisis response and we have plenty of time to rebuild them, why not just get rid of them? There are good reasons to hang onto at least some of the inactive plants, particularly those with modernized facilities:

o Plants are situated on land well suited for industrial purposes and difficult to replace once lost to the civilian sector. They provide excellent locations in which to reconstitute production of ammunition and other critical military items should the need arise.

o Extensive environmental contamination makes it difficult and costly to transfer plants to the civilian sector. A recent estimate projected costs exceeding one billion dollars to cleanup government-owned ammunition plants.[22]

o It is extremely expensive to repurchase land and rebuild plants from scratch. Short-term maintenance and carrying costs for inactive plants are similar to insurance premiums - recurring premiums are a burden, but if disaster ever strikes, they are a welcome investment.

o Inactive plants have deterrent value. By providing a visible and expansional ammunition industrial base, they might keep unfriendly nations from trying to drag the U.S. into protracted regional conflicts.

o They reduce the response time to regenerate high volume production. This is important in case a global threat suddenly reemerges or political leaders fail to react to warning signs.

While there are good reasons for the U.S. Army to retain portions of the inactive base, economic realities make this a difficult option. There will be unrelenting pressure to further reduce the size of the ammunition complex. This is not all bad since much of base appears excess to any forseeable military requirement. However, we need to ensure that the downsizing is not overdone. The forces which have historically done away with most of the ammunition industry following wars are once again at work. Any strategy, which mitigates against these forces is one that merits strong support - facility contracting tries to fill that bill.

FACILITY CONTRACTING - PAST AND PRESENT

Facility contracting is not new; it has been a component of federal acquisition policy for many years. The military, however, has been slow in adopting the concept in the government-owned ammunition complex. Some progress has been made over the last forty years, but given our situation today, DOD should embrace facility contracting more fully.

The Evolutionary Process Leading to Facility Contracting

Application of facility contracting within the ammunition complex did not come in one giant leap but evolved over the last forty years as ammunition base managers tried to control costs and make better use of the government's multi-billion dollar investment.

Throughout the 1950s and 1960s, ammunition base managers had two approaches to the use of government-owned plants, one for active areas and one for inactive areas. Active plants responded to production requirements dictated by AMCCOM (and its predecessor organizations) - a process called workloading. Workloading remains the primary means by which plants receive work. For inactive plants and inactive areas on active plants, the Corps of Engineers leased idle buildings and land to both government and commercial organizations. Most leases were for agriculture, lifestock grazing, administrative buildings, and storage space.[23] The leasing process did not lend itself well to commercial production applications because of the long time required to obtain administrative approvals from U.S. Army headquarters and the Corps of Engineers.[24]

The advent of more complicated munition systems in the 1970s had a or impact on the government-owned base. The government increasingly turned to the private sector to oversee the development and production of the entire weapon system, including the munition components. The plant base, the sole source for many components such as explosives and propellants, had no means to bring in work from private sources. To prevent costly private duplication of existing government-owned capability, AMCCOM authorized plant operating contractors to enter into contracts with other DOD agencies and private contractors with government contracts.[25] This process is called third party contracting.

Third party contracting has become a large source of work for GOCO plants. It is also used today as the basis for private companies to compete for work in foreign markets. The most successful application of third party contracting is at Kansas Army Ammunition Plant, where Day and Zimmerman (operating contractor) generates over 50% of the plant's work from third party contracts.[26]

Even with leasing and third party initiatives, there were huge portions of the production base untouched. There was still no effective method to let a private company enter the base and use idle facilities. To take advantage of this opportunity, AMCCOM introduced a limited form of today's facility contracting. The contract, between AMCCOM and the interested company, bypassed the plant contractor entirely. One of the largest applications of this approach is at Twin Cities Army Ammunition Plant where Federal Cartridge Company has the government contract to operate the plant, but Alliant Tech Systems (producer of munitions for DOD contracts) uses sixty-three buildings on the facility and employs over 1,000 people.[27]

Why Move to a Broader Application of Facility Contracting?

While workloading, leasing, third party contracting, and limited facility contracting fulfill most needs to use the base, the application of all four approaches concurrently creates a complicated administrative and jurisdictional web. One plant can have the standard contractual link between the operating

contractor and AMCCOM, multiple lease arrangements administered by the Corps of Engineers, and a facility contracting arrangement between another contractor and AMCCOM. This arrangement saddles plant government staffs with a growing workload and leaves everyone pointing fingers in somebody else's direction when something goes wrong.

The comprehensive application of facility contracting at an inactive plant is, therefore, a step to gather these approaches under one umbrella. It puts the contractor in a more central role as the focal point for plant operations and forces him to shoulder more of the burden and responsibility for administering the plant. The government, in theory, can pull back - an inevitable trend given DOD's declining budget.

Facility Contracting - Current Concept

By entering into a facility contract with a plant operating contractor, AMCCOM (DOD's ammunition base manager) gives the contractor freedom to seek work from DOD, other government agencies, as well as foreign and domestic commercial customers. This is a change from AMCCOM's past policy which allowed contractors to produce only items consistent with the plant's production capabilities. Under the facility contracting concept, an operating contractor is free to produce small arms at a plant traditionally geared to make tank ammunition and can also use facilities and equipment to produce such obviously non-DOD items

as refrigerators and heaters.[28] The contractor has a chance to transform an inactive plant (with minimal staffing and limited profit potential) to a much higher level of activity with all the benefits and risks inherent in the free-market system.

Facility contracting also opens a second avenue for the operating contractor to increase business - direct subcontracting of facilities and equipment to other companies. While most fees and usage charges flow back to the government, the operating contractor benefits by providing support services (building maintenance, security, fire protection, etc.) for a fee, and by allocating a fair share of overhead charges to tenants. The additional allocation of overhead helps reduce the operating contractor's costs and makes the company more competitive for additional work.

The government's principal objectives in entering into a facility contract are twofold: reduced cost and increased readiness. As the contractor brings work onto the plant, he assumes the maintenance and operational burden for all buildings and equipment being used, freeing the government from bearing these costs. Any reduction in overhead due to the added work ripples to all government funded projects. On the readiness side, increased activity (larger workforce and more active facilities) shortens the plant's response time to regenerate its ammunition production capability. Thus, facility contracting sets in motion forces which have the potential to create a win-win situation[29] - the ideal posture for both parties.

Regulatory Basis for Facility Contracting

Federal Acquisition Regulation (FAR) Subpart 45.3, "Providing Government Property to Contractors," is the regulatory basis for facility contracting. The FAR defines facility contracting as "a contract under which Government facilities are provided to a contractor or subcontractor by the Government for use in connection with performing one or more related contracts for supplies and services."[30]

While there are many provisions mandated in the FAR, particularly in the areas of property control and liability, the following are the key ones shaping its application at an ammunition plant:

- o The contractor must maintain all facilities he uses (to a level approved by the government) at no cost to the government.
- o The contractor must pay all incremental costs generated by his use of the facilities.
- o The contractor can use facilities for government work on a rent-free basis and must pay a fair rental/usage charge for commercial work (calculated IAW FAR guidelines).[31]

Government Oversight and Regulation

To further reduce operating costs (for both the government and contractor), AMCCOM has carried the "commercialization" of government-owned plants a step further. Contractors run facility contracted plants under "best commercial practices", eliminating many of the bureaucratic and inefficient procedures associated with typical government installations.[32] The government (in

this case AMCCOM) continues to have a strong hand in the operation of the plant. For example, the contractor must receive written approval from AMCCOM before introducing new work or tenants onto the plant. This gives AMCCOM a mandated checkpoint to stop any action jeopardizing safety, environmental quality, or otherwise adversely impacting the government's interests.[33] A small government staff (three to six people) remains at the plant to monitor contractor and tenant operations and to evaluate the contractor's performance of government funded work. Thus, government oversight remains active throughout all phases of facility contracting.

The Mississippi AAP Experience

If enthusiasm counts, facility contracting appears a certain success as operating contractors of plants slated for inactivation eagerly move down the long road to seal a contract. However, after almost two years of work, only one plant - Mississippi Army Ammunition Plant (MSAAP) - has a facility contract in place, and it has done little to reshape that plant.

With fanfare, AMCCOM and Mason Technologies Inc. (MTI), MSAAP's operating contractor, signed the first facility contract in March 1992. MSAAP looked like an ideal candidate. About ten years old, with over $700 million of relatively new facilities and equipment, it shines in comparison to the aged production and support facilities making up much of the plant base. DOD inactivated MSAAP due to the large inventory of its one product

(M483 artillery rounds) and the high cost of converting the automated production line to other items - not due to deficiencies in the plant's infrastructure. In fact, many of the production support areas with the highest reutilization potential (e.g. warehouses, nonexplosive fabricating shops) are essentially new, completed in a final construction phase that ended in 1990.

To date, facility contracting has done little to change the plant's fortunes. The two year layaway of the plant ended in late 1992 with MTI's workforce declining from 1,700 to around 100 today - customary for plants in total layaway. The limited work MTI brought to the plant (a five million dollar contract to manufacture artillery projectile bases and a subcontract to a small private company) was too small to generate any significant benefits for either the government or MTI.[34]

Facility contracting has not turned into an instant success for ma· reasons. The following forces most thwarted progress:

o DOD's accounting system resulted in unrealistic and unpredictable overhead charges. This complicated the decision-making of companies interested in subcontracting plant property.

o Many liability issues, particularly in the environmental arena, were not fully resolved.

o The recent recesssion and weak recovery dampened economic activity and created a difficult economic environment for defense firms to diversify into commercial markets.

o Small businesses and new start companies, the areas of greatest opportunity for facility contracting, had a difficult time obtaining capital because many banks were recovering from recent bad loans.

o There is no civilian counterpart to the ammunition industry making some buildings unuseable for other types of work.

OTHER IMPORTANT DIMENSIONS - POLITICAL AND PUBLIC

Carl Von Clausewitz, noted 19th century German military strategist, teaches that "war is a remarkable trinity, in which the directing policy of the government, the professional qualities of the Army, and the attitude of the population all play an equally significant part."[35] In a democratic society, this philosophy spills over into peacetime where the public's will and political resolve to support military forces and infrastructure are crucial.[36] Any strategy such as facility contracting, which directly influences how government installations operate, must consider all three sides of Clausewitz's trinity. The focus thus far has been to look at facility contracting from the perspective of the military and the defense industrial base (the Army side). The discussion now shifts to the two other points of Clausewitz's trinity - the political and public realms.

The Political Dimension

The drive to generate a "peace dividend" dominates the U.S. political agenda. Defense cutbacks, while good from a budgetary perspective, translate into installation closures and ammunition plant inactivations - real political "hot potatoes." Once a politician looses a fight to keep an ammunition plant active, his focus shifts to pursuing initiatives which help ease adverse impacts on affected communities. Congressmen have embraced

the largest employer in the area, and reduction in plant activities seriously affects the region's economy. The economic impact can be devastating - rising unemployment, declining house values, shrinking tax base, and underused public facilities.

Communities with ammunition plants slated for inactivation face a much tougher challenge than communities confronting a normal DOD base closure. In most cases, the typical government installation leaves DOD's domain and becomes a public or private asset. In either case, the community gains property and facilities with some economic potential. The same does not apply to ammunition plants. Inactive plants historically remain much like ghost towns. Even if DOD decides an ammunition plant is no longer needed, the process of cleaning pollution and transferring it to the public or private sector can take a decade or longer. The community is, then, saddled with a huge, decaying industrial facility which contributes nothing to the areas economic health.

Ammunition plants cannot run without a highly trained and dedicated workforce. A recent study by Congress's Office of Technology Assessment, "Building Future Security - Strategies for Restructuring the Defense Technology and Industrial Base", states that "people are the single most important ingredient of the defense technology and industrial base."[39] The study further goes on to say:

> The objective of a future defense technology and industrial base (DTIB) human resource policy should not be to retain the maximum number of people currently employed in the defense industry but to ensure that individuals and teams with essential skills are preserved, and to help those who leave the DTIB to maintain relevant skills in the civil sector.[40]

Facility contracting carries the Office of Technology Assessment's human resource policy to the ideal extreme - former ammunition plant workers stay employed at the plant in civil sector jobs. Thus, a metal parts forge room operator might be stamping out piping instead of projectile bodies. The employee still has a job, the plant continues to contribute to the community, DOD's readiness posture improves, and the local Congressman can take credit for helping the district. All points on Clausewitz's trilogy gain if facility contracting succeeds.

FUTURE CONSIDERATIONS

The effort to implement facility contracting resembles a relay race. The Army ran the first leg and created an innovative approach to improve the readiness of the ammunition production base and lower its costs. While the facility contracting concept received much favorable publicity and strong political backing, it had little immediate impact. There were too many obstacles in the way: a slow economy, shortage of high risk capital, high cost of converting plants to other work, and inflated overhead rates that made contractors noncompetitive.

Congress, recognizing an opportunity to help a core constituency, took the baton over the next leg and instituted the ARMS Act. The ARMS Act provided the legislation to make facility contracting not just an Army initiative but a program operating under the full auspices of the U.S. Government. Furthermore, Congress provided the necessary funds and administrative changes to overcome many of the obstacles impeding facility contracting. This included business venture loans, grants to reconfigure plants for new enterprises, and subsidies to offset high overhead rates.

Now its the Army's turn to once again take the baton and translate the ARMS Act into a program which makes facility contracting a reality. To Congress' credit, it gave the Secretary of the Army a free hand in implementing the ARMS Act and moving facility contracting to the next stage. A joint Congressional conference report emphasizes this point in the following statement:

> The conferees fully expect the Secretary (Army) will continue to examine new and innovative ideas, beyond those already proposed for the ARMS Initiative, that might stimulate expanded commercial interest in Government-owned ammunition facilities. The conferees .... urge that funds available for the Initiative be apportioned to take advantage of emerging needs. Finally, the conferees believe that an equitable mechanism must be established for the shared cost of maintenance and upkeep of common use infrastructure at government owned plants between the government, contractors and subcontractors.[41]

Where Does DOD and the U.S. Army Go From Here?

Implementation of the ARMS Act is the focal point for future activity. On the road to implementing the ARMS Act, senior DOD and U.S. Army leaders need to consider the following points:

o Instant success is unlikely. It will take time to generate the first small success stories and overcome the many known and hidden obstacles that will appear. History shows that most efforts to convert defense industries to civil sector work have failed. Because of the strong political and military backing for facility contracting, it has a chance to be one of the few successful defense conversion stories.

o DOD's cost accounting system will not work. The current approach seems to be one of tinkering with the existing cost accounting system just enough to make it work. Inflated overhead costs inherent in the GOCO plant base and integral to DOD cost accounting hinder facility contracting and lead plant operating contractors and subcontractors to circumvent the system. Facility contracted plants need an entirely new cost accounting system based on commercial realities and incentives.

o Contractors and subcontractors need stability. Contractors and subcontractors cannot survive in an environment where overhead and other charges continually fluctuate. They need some measure of certainty to accurately calculate costs and prepare bids for work. DOD and plant operating contractors need

a mechanism to enter into longer term arrangements which provide more pricing stability.

o DOD cannot get greedy. Because of cost restraints, there is a tendency in DOD to push as many costs onto others as possible. This tendency will destroy facility contracting. If contractors and subcontractors feel that DOD is laying a trap to later snare them with extra costs, they will not come or will abandon the plant later. DOD can be a big winner if it keeps costs low and recognizes the large rewards that come later as plant activity grows.

o DOD should minimize oversight of contractor activities. DOD needs to let operating contractors run facility contracted plants without constant government interference. The government cannot afford the oversight, and excess oversight will make operating contractors uncompetitive and unable to respond to the rapid pace of the free market. This represents a major change for government employees at GOCO plants who have worked in a culture which made the government staff almost a second plant management team. DOD needs to reeducate government employees on their new roles and establish clear ground rules so everyone knows where proper oversight ends and government interference begins.

o The government cannot walk away from environmental liability. The environment remains one area in which the

government needs to maintain constant vigilance. While operating contractors and tenants have a responsibility to obtain required environmental permits and comply with environmental laws, the government, as landowner, can be held pecuniarily liable for certain violations and responsible for cleanup costs in the event of a major pollution incident. Thus, the environment and related programs are areas where the onsite government staff needs to concentrate its attention.

o Clausewitz's Trilogy will remain important. Facility contracting can only succeed if the government, military (includes operating contractors and other interested companies) and local community work together. At the local level, the focus of the "trilogy" team should be on marketing the plant and local areas, coordinating assistance required by interested companies, and retraining employees. At higher levels, "trilogy" teams should concentrate on developing procedures and policy intiatives needed to effectively implement the ARMS Act.

SUMMARY

> Americans have shown their dislike for organized war by a desperate attachment to three principles: unpreparedness until the eleventh hour; the quickest feasible strategy for victory regardless of political aims; and instant demobilization, no matter how inadvisable.
>
> Barbara Tuchman
> International Institute of Strategic Studies, 1982 [42]

The government now faces the same decision it faced following the World Wars - save the ammunition plant base or discard it. Following both wars, we chose to discard or neglect idle plants and paid a high price later to rebuild them. Transferring a plant to the private sector is no longer the cheap or easy alternative because environmental cleanup costs are so high. The historical alternatives - lay away plants or convert them to caretaker status (close the gate and walk away) - do little to improve readiness or meet community and political interests.

Facility contracting is a cost effective alternative. It significantly improves the readiness of inactive plants without major DOD investment. It also offers a politically popular means for DOD to maintain an expandible inactive plant base - a deterrent to any country trying to drag the U.S. into protracted conflict. Most important, facility contracting creates a potent alliance involving the military, political system, and local communities.

Facility contracting sounds great, but will it work? The answer can only come by giving it a try. The path will not be easy, but if facility contracting succeeds, we may finally break the chain reaction which has led to the decay and dissolution of the ammunition production base after past wars.

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